

[NAME OF DOCUMENT] CLAIMS

[Claim 1]

An optical recording disc constituted so that data can be recorded therein and reproduced therefrom by being irradiated with a laser beam,
5 the optical recording disc comprising a laminated body formed by laminating a decomposition reaction layer containing platinum oxide PtOx as a primary component and a light absorbing layer so as to sandwich at least a dielectric layer, x in the chemical formula: PtOx being equal to or larger than 1.0.

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[Claim 2]

An optical recording disc in accordance with Claim 1, wherein the decomposition reaction layer is formed so that x in the chemical formula: PtOx of the platinum oxide is equal to or larger than 1.5.

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[Claim 3]

An optical recording disc constituted so that data can be recorded therein and reproduced therefrom by being irradiated with a laser beam, the optical recording disc comprising a laminated body formed by
20 laminating a decomposition reaction layer containing platinum oxide PtOx as a primary component and a light absorbing layer so as to sandwich at least a dielectric layer, the decomposition reaction layer having a light absorption coefficient k equal to or lower than 2.0.

25 [Claim 4]

An optical recording disc in accordance with Claim 3, wherein the decomposition reaction layer has a light absorption coefficient k equal to or lower than 1.0.

[Claim 5]

An optical recording disc in accordance with Claim 1, wherein when the decomposition reaction layer is irradiated with a laser beam, a
5 bubble pit is formed in the decomposition reaction layer and fine particles of platinum precipitate in the bubble pit, whereby a recording mark is formed in the decomposition reaction layer.

[Claim 6]

10 An optical recording disc in accordance with Claim 3, wherein when the decomposition reaction layer is irradiated with a laser beam, a bubble pit is formed in the decomposition reaction layer and fine particles of platinum precipitate in the bubble pit, whereby a recording mark is formed in the decomposition reaction layer.

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[Claim 7]

An optical recording disc in accordance with Claim 1, wherein the platinum oxide contained in the decomposition reaction layer as a primary component is decomposed into platinum and oxygen when the
20 decomposition reaction layer is irradiated with the laser beam.

[Claim 8]

An optical recording disc in accordance with Claim 3, wherein the platinum oxide contained in the decomposition reaction layer as a
25 primary component is decomposed into platinum and oxygen when the decomposition reaction layer is irradiated with the laser beam.

[Claim 9]

An optical recording disc in accordance with Claim 1, wherein the light absorption layer contains at least one of Sb and Te.

[Claim 10]

5 An optical recording disc in accordance with Claim 3, wherein the light absorption layer contains at least one of Sb and Te.

[Claim 11]

10 An optical recording disc in accordance with Claim 1, wherein the dielectric layer and the light absorption layer are deformed when the bubble pit is formed in the decomposition reaction layer.

[Claim 12]

15 An optical recording disc in accordance with Claim 3, wherein the dielectric layer and the light absorption layer are deformed when the bubble pit is formed in the decomposition reaction layer.

[Claim 13]

20 A method for manufacturing an optical recording disc comprising a laminated body formed by laminating a decomposition reaction layer containing platinum oxide PtOx as a primary component and a light absorbing layer so as to sandwich at least a dielectric layer and constituted so that data can be recorded therein and reproduced therefrom by being irradiated with a laser beam, the method for
25 manufacturing an optical recording disc comprising steps of applying power onto a target containing platinum as a primary component with a power density smaller than 4 W/cm^2 in a sputtering gas atmosphere containing oxygen in an amount of a flow ratio equal to or larger than

10 % and forming the decomposition reaction layer by a sputtering process.

[Claim 14]

5 A method for manufacturing an optical recording disc in accordance with Claim 13, wherein the decomposition reaction layer is formed by setting the power density to be smaller than 2 W/cm^2 .

[Claim 15]

10 A method for manufacturing an optical recording disc in accordance with Claim 13, wherein the decomposition reaction layer is formed by setting a pressure in a chamber to be equal to or higher than 0.5 Pa when the sputtering gas is introduced into the chamber.

15 [Claim 16]

 A method for manufacturing an optical recording disc in accordance with Claim 13, wherein the decomposition reaction layer is formed by setting a film forming rate for forming the decomposition reaction layer to be lower than 250 Å/min .

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